

# HUNTON & WILLIAMS

RIVERFRONT PLAZA EAST TOWER

951 EAST BYRD STREET

RICHMOND, VIRGINIA 23219-4000

TELEPHONE (804) 788-8200

FACSIMILE (804) 788-8213

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June 3, 1996

BY HAND

William F. Caton  
Acting Secretary  
Office of the Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, D.C. 20554

JUN 3 - 1996

CC Docket No. 96-98  
Reply Comments of Virginia Power

Dear Mr. Caton:

Transmitted herewith on behalf of Virginia Power are an original and twelve copies of reply comments in the above-referenced proceeding.

If you have any questions concerning this filing, please call me.

Very truly yours,

*Charles H. Carrathers III*

Charles H. Carrathers, III

Enclosure

96-98

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Virginia Power Reply Comments of June 3, 1996

JUN 3 - 1996

## EXECUTIVE SUMMARY

### 1. Meaning of "Poles, Ducts, Conduits and Rights-of-Way". Several attaching

entities claim that the phrase "poles, ducts, conduits and rights-of-way" should be construed broadly to include all utility "pathways," such as private easements, entrance facilities, equipment rooms, manholes, cable vaults, closets, and risers. The Commission should reject such a strained interpretation of the Act. It is well settled that a statute should be construed in accord with its plain language, and there is no evidence that Congress intended the Act to be construed so as to grant third parties a universal right of access to substantial all of a utility's infrastructure.

2. Reserve Space and "Insufficient Capacity". Several attaching entities claim that utilities should not be allowed to reserve space on their poles, and that if reserve space exists utilities cannot deny access for reasons of insufficient capacity. As discussed in the attached report prepared by Clapp Research Associates, this position is contrary to prudent utility practices and would adversely affect the safety and reliability of utility service.

3. Denying Access for Reasons of Safety, Reliability or Engineering Purposes. Many attaching entities urge the Commission to adopt "quantifiable" standards under which utilities may deny access for safety, reliability, or engineering purposes, such as the NESC or the National Electric Code (NEC), and almost all attaching entities propose that the utilities bear the burden of proof in denying access. The Commission should reject these proposals. The attached report prepared by Clapp Research Associates discusses some of the safety and reliability issues that utilities must address, and concludes that any rule purporting

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to establish "quantifiable standards" for safety and reliability is not practicable. This report also supports the electric industry's position that safety and reliability concerns should take precedence over the private interests of any attaching entity.

4. Modifications and Alterations Under § 224(h). The timing for notice of alterations or modifications should depend on the planning needs and practices of the utility, not the attaching entity. Contrary to the opinion of some parties, the PAA does not grant attaching entities a license to dictate utility policies and procedures. Virginia Power believes that the Commission should leave the manner and timing of notification to the negotiation of the parties.

5. Miscellaneous Issues. The Commission should reject every attempt by attaching entities to impose requirements upon utilities that are not specifically mandated by the Telecommunications Act of 1996.

\* \* \*

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Implementation of the Local Competition	)	CC Docket No. 96-98
Provisions in the Telecommunications Act	)	
of 1996	)	
	)	

**REPLY COMMENTS OF VIRGINIA ELECTRIC AND POWER COMPANY**

Virginia Electric and Power Company (Virginia Power) respectfully submits these Reply Comments in accordance with the Notice of Proposed Rulemaking (NOPR) issued by the Federal Communications Commission on April 19, 1996.

**Preliminary Statement**

In response to the Commission's NOPR, over sixty parties filed comments on May 20, 1996 addressing those sections of the Telecommunications Act of 1996 ("the Act") governing access to utility poles, ducts, conduits and rights-of-way. Not surprisingly, the comments submitted by cable companies and other attaching entities urge the Commission to construe broadly the Act's provisions and to require electric utilities and other pole owners to alter their current safety, reliability and engineering practices to accommodate the interests of attaching entities.

For example, several attaching entities claim that their "access rights" to utility poles, ducts, conduits and rights-of-way include access to all utility "pathways," such as private easements, entrance facilities, equipment rooms, manholes, cable vaults, telephone closets,

and risers.<sup>1</sup> Indeed, at least one commentator believes it has the right to dictate the work schedules of utility employees, arguing that "[s]ome utilities have been known to inflate [their] preparatory fees by claiming that their personnel are unavailable to do the required work [for attaching entities] except on an overtime basis. Utilities should not be entitled to charge for overtime unless the entity requesting the attachment specifically requests that work be done outside of normal business hours."<sup>2</sup>

Furthermore, many attaching entities argue that utilities should be prohibited from reserving space on their poles,<sup>3</sup> and that utilities should bear the burden of proof in denying access for any reason, including safety, reliability, and engineering reasons. Also, many attaching entities urge the Commission to adopt a single standard under which a utility may deny access to its facilities.

Virginia Power respectfully requests that the Commission reject the proposals submitted by the various attaching entities. As discussed below, many of these proposals would compromise the integrity of electric transmission and distribution systems and would adversely affect the safety and reliability of electric service. These issues are discussed in detail in the attached report prepared by the Clapp Research Associates, which is a nationally-recognized engineering and consulting firm specializing in electric utility safety practices. In fact, the founder of Clapp Research Associates is the immediate past Chairman

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<sup>1</sup> See, e.g., Comments of AT&T Corp., at page 15.

<sup>2</sup> Comments of GST Telecom, Inc., at pages 6-7

<sup>3</sup> For purposes of these Reply Comments, the term "pole" shall mean the "poles, ducts, conduits and rights-of-way" governed by the Act.

of the National Electrical Safety Code (NESC) Committee, and the author of the attached report is a professional engineer and a member of the Society of Cable Television Engineers. Virginia Power submits that this expert report is more probative of utility safety concerns than the arguments made by cable industry lawyers

### **Reply Comments**

#### **1. Meaning of "Poles, Ducts, Conduits and Rights-of-Way"**

Several attaching entities claim that the phrase "poles, ducts, conduits and rights-of-way" should be construed broadly to include all utility "pathways," such as private easements, entrance facilities, equipment rooms, manholes, cable vaults, closets, and risers.<sup>4</sup> The Commission should reject such a strained interpretation of the Act. It is well settled that a statute should be construed in accord with its plain language,<sup>5</sup> and there is no evidence that Congress intended the Act to be construed so as to grant third parties a universal right of access to substantial all of a utility's infrastructure.

Moreover, the phrase "poles, ducts, conduits and rights-of-way" is not new -- it has been part of Pole Attachment Act (PAA) since 1978, when the PAA was enacted.<sup>6</sup> The Commission has interpreted the word "pole" to mean distribution poles,<sup>7</sup> and has not

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<sup>4</sup> See, e.g., Comments of AT&T Corp., at page 15; Comments of MCI, at page 23.

<sup>5</sup> See, e.g., United States v. Ron Pair Enterprises, Inc., 489 U.S. 235 (1989).

<sup>6</sup> See 47 U.S.C. § 224(a)(4).

<sup>7</sup> See, e.g., In the Matter of Logan Cablevision, Inc. v. Chesapeake & Potomac Tele. Co., 1984 FCC Lexis 2400 (1984).



extended the definition of this word beyond its plain meaning. In sum, the focus of the original PAA was on distribution poles and underground ducts and conduits used for distribution facilities, and the Telecommunications Act of 1996 does not purport to expand the reach of the PAA. Therefore, any attempt to broaden the scope of the phrase "poles, ducts, conduits and rights-of-way" should be rejected.

## 2. Reserve Space and "Insufficient Capacity"

Several attaching entities claim that utilities should not be allowed to reserve space on their poles, and that if reserve space exists utilities cannot deny access for reasons of insufficient capacity.<sup>8</sup> As discussed in the attached report prepared by Clapp Research Associates, this position is contrary to prudent utility practices and would adversely affect the safety and reliability of utility service. Moreover, such a rule would require electric utilities to expand the capacity of all their existing poles, ducts and conduits immediately in anticipation of attachment requests by cable companies and telecommunications providers. Congress could not have intended such illogical results, especially since utilities always have reserved space in anticipation of future needs. If Congress had intended to interfere with this long-standing and well-established industry practice, it certainly would have said so. See e.g., United States v. Turner Turpentine Co., 111 F.2d 400, 404 (5th Cir. 1940) ("It is now a settled principle of statutory construction that Congress or a legislature, in legislating with regard to an industry or activity, must be regarded as having had in mind the actual

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<sup>8</sup> See e.g., Comments of American Communications Services, at page 8.

conditions to which the act will apply, that is, the needs and usages of such activity.").

Finally, at least one attaching entity argues that utilities should not be able to deny access for "insufficient capacity" if the utility is able to rearrange existing attachments or install additional ducts and conduits to create capacity.<sup>9</sup> This proposal has absolutely no statutory support -- nowhere in the Act has Congress imposed an affirmative obligation upon utilities to *create* capacity for the benefit of an attaching entity.<sup>10</sup>

### 3. Denying Access for Reasons of Safety, Reliability or Engineering Purposes

Many attaching entities urge the Commission to adopt "quantifiable" standards under which utilities may deny access for safety, reliability, or engineering purposes,<sup>11</sup> such as the NESC or the National Electric Code (NEC).<sup>12</sup> and almost all attaching entities propose that the utilities bear the burden of proof in denying access.<sup>13</sup>

The Commission should reject these proposals. As noted in Virginia Power's Initial Comments and in the comments of other electric utilities, the safety and reliability issues

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<sup>9</sup> Comments of GST Telecom, Inc., at pages 5-6.

<sup>10</sup> Attachment B is a letter from Virginia Power's Director of Distribution Engineering & Operations, which includes additional responses to some of the comments made regarding reserve space.

<sup>11</sup> See, e.g., Comments of AT&T Corp., at page 17.

<sup>12</sup> Comments of GST Telecom, Inc., at page 6 (utility must justify its decision to deny access based on published safety standards, such as the NEC).

<sup>13</sup> See, e.g., Comments of MCI, at page 21 (proposing that the Commission adopt a "rebuttable presumption" that access is possible)

surrounding the use of electric utility facilities are complex and very fact-dependent. It is impossible to articulate a complete list of "quantifiable standards" under which access could be denied for safety, reliability or engineering reasons. Moreover, the NESC and NEC are intended to be minimum standards of general applicability. Electric utilities must have the latitude to establish stricter standards and practices if necessary to promote safety and reliability.

Similarly, the suggestion that a quantifiable threat to safety or reliability be established as a standard for denying access to a pole fails to account for the degree of engineering judgement that must be applied to each individual situation. If attachments are refused only in cases in which there is a palpable hazard, the safety and reliability of electric service will be degraded significantly.

The attached report prepared by Clapp Research Associates discusses some of the safety and reliability issues that utilities must address. This report concludes that any rule purporting to establish "quantifiable standards" for safety and reliability is not practicable, and that any attempt to impose such a rule would compromise the safety and the reliability of the nation's electric system. This report also supports the electric industry's position that safety and reliability concerns should take precedence over the private interests of any attaching entity. Accordingly, the Commission should adopt a rebuttable presumption that a utility's denial of access for safety, reliability or engineering reasons is correct and place the burden of proof on such issues where it belongs - namely, upon the entity seeking to make an

attachment.<sup>14</sup>

4. Modifications and Alterations Under § 224(h)

a. *Manner and Timing of Notification*

At least one party has proposed that utilities be required to give at least one year's prior notice for any modification or alteration so that a user can "determine its future business and economic needs and [determine] if it wants to make any additions or alterations."<sup>15</sup> Other have proposed notice requirements ranging from six months to ten days.

The timing for notice of alterations or modifications should depend on the "future business and economic needs" of the utility, not the attaching entity. Contrary to the opinion of some parties, the PAA does not grant attaching entities a license to dictate utility policies and procedures. Virginia Power believes that the Commission should leave the manner and timing of notification to the negotiation of the parties, especially since the manner and timing of such notification will vary depending upon a number of circumstances, such as a utility's expected versus actual growth in a given geographic area.

If, however, the Commission decides to adopt a specific time period for notification, then the Commission should make clear that such time period applies only to planned modifications or alterations by the utility. As discussed in Virginia Power's Initial

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<sup>14</sup> Attachment B also addresses some of the safety, reliability and engineering concerns raised by the parties to this proceeding.

<sup>15</sup> Comments of Teleport Communications Group, Ltd., at page 22.

Comments, Section 224(h) should not be construed as limiting the right and ability of a pole owner to take immediate action to rectify any emergency situation that threatens safety or service reliability.

b. *Proportionate Share of Costs for Modifications*

Subsection 224(h) of the revised PAA specifically requires attaching entities to bear a "proportionate" share of the costs incurred by the owner in making the pole, duct, conduit or right-of-way accessible. Notwithstanding this plain language, some parties have asserted that attaching entities' payments for modifications should be based on a utility's incremental cost. This position should be rejected. If Congress had intended to adopt incremental cost-based rates for modifications rather than proportionate cost-based rates it would have expressly stated so, as it did elsewhere in the Act.<sup>16</sup> *Cf. Sullivan v. Everhart*, 494 U.S. 83, 88 (1990) ("In ascertaining the plain meaning of the statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole.") (quoting *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 291 (1988)).

5. Miscellaneous Issues

At least one attaching entity has proposed that utilities be required to respond to requests for access within 10 business days, and that access "generally should be made available within 30 days thereafter."<sup>17</sup> This same entity proposes that utilities should be

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<sup>16</sup> See, e.g., H.R. Rep. No. 104-458, at page 175 (commenting on the "incremental-cost-based rates" of providing access to broadcast platforms).

<sup>17</sup> Comments of American Communications Services, at page 7.

required to file "periodic reports of the number of right-of-way agreements entered by them and descriptions of the basic terms of each such agreement," and that such terms be made available to all other attaching entities.<sup>18</sup>

Each of these proposals should be rejected. First, the ability of a utility to respond to any request for access and to make access available will vary depending upon a number of factors, such as the number of utility employees available to respond, the number of parties requesting access during a given period of time, the weather conditions, the type of access requested, and the need to examine poles, ducts and conduits to determine whether sufficient capacity exists. Therefore, the Commission should not attempt to create a rule governing the time within which utilities must respond to requests or make access available.

Furthermore, Congress did not intend that electric utilities be required to file "periodic reports" on pole attachment agreements. As evidenced by subsection (e)(1) of the PAA, Congress intended that the parties *negotiate* their pole attachment agreements, and this negotiation process anticipates that the terms and conditions of access might vary among attaching entities.

Moreover, Congress did not specifically impose a disclosure requirement upon electric utility pole attachment agreements and did not specifically require electric utilities to make the terms and conditions in such agreements generally available. In contrast, Congress specifically imposed a disclosure requirement upon LEC interconnection agreements, and Congress specifically required LECs to make the terms and conditions of such agreements

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<sup>18</sup> Id. at 8.

generally available to other parties.<sup>19</sup> If Congress intended to impose these same requirements upon electric utilities, it certainly knew how to do so. Congress' silence thus indicates it did not intend that such a requirement apply to electric utilities. See Sullivan v. Everhart, 494 U.S. 83, 88 (1990).

#### 6. Issues Outside the Scope of This Proceeding

Paragraphs 220-225 of the Commission's NOPR set forth the specific issues to be addressed in this proceeding. Indeed, the Commission states in footnote 301 of the NOPR that it will conduct separate proceedings to address other issues raised by the amendments to the PAA, such as the charges for pole attachments.

Notwithstanding the plain language of the NOPR, several parties filed comments that go beyond the scope of this proceeding. For example, one party proposes that compensation for access be set at "total service long run incremental cost" on the basis of the proportionate space used by each entity.<sup>20</sup> Another party argues that all current pole attachment agreements should be voided and renegotiated, or that the Commission should offer attaching entities a six-month "fresh look" at existing pole attachment agreements.<sup>21</sup> Yet another party proposes that utilities be required to provide cable plats and conduit prints showing the

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<sup>19</sup> See Subsections 252(h) and (i) of the Act

<sup>20</sup> Comments of MCI, at pages 23-24.

<sup>21</sup> Comments of American Communications Services, at page 7.

nature and location of poles, and that such materials should be produced at the utilities' expense.<sup>22</sup> Finally, a competitive access provider argues that (i) the Commission should limit the fees utilities may charge for surveys and engineering work, (ii) that attaching entities should pay only the incremental costs for such work, and (iii) that utilities should not charge overtime unless the attaching entity expressly requests it.<sup>23</sup>

Virginia Power will not reply to these comments because they are outside the scope of the instant proceeding.<sup>24</sup> If, however, the Commission elects to address any issue not specifically identified in paragraphs 220-225 of its NOPR, Virginia Power respectfully requests that the Commission provide all interested parties with notice and an adequate opportunity to comment.

### **Conclusion**

Virginia Power is vitally interested in the Commission's rules implementing the access provisions of the PAA, because these rules could significantly affect the safety and reliability of electric service. Virginia Power believes that the provision of safe and reliable electric service should take precedence over the private interests of third-party attachers, and that the Commission should carefully consider the interests of electric consumers in drafting any pole

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<sup>22</sup> Comments of AT&T, at page 19.

<sup>23</sup> See generally Comments of GST Telecom, Inc.

<sup>24</sup> Virginia Power notes, however, that many of these proposals are unsupported by the Act. In this regard, the attaching entities' comments are more akin to a Christmas "wish list" than serious comments.

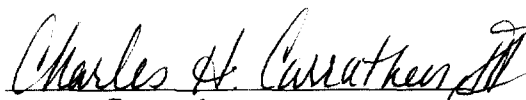


Virginia Power Reply Comments of June 3, 1996

attachment rules.

Respectfully submitted,

VIRGINIA ELECTRIC & POWER COMPANY

  
Counsel  
(JAC)

Date: June 3, 1996

Richard D. Gary  
Charles H. Carrathers III  
Hunton & Williams  
951 East Byrd Street  
Richmond, Virginia 23219

Frank A. Schiller, Esq.  
Virginia Power  
One James River Plaza  
701 E. Cary Street  
Richmond, VA 23219-3932

**Safety, Engineering and Reliability Issues Relating to Pole Attachments**

**A Discussion Paper by:**



*Johnny B. Dagenhart*

**May 31, 1996**

**Clapp Research Associates, P.C.**

**6112 Saint Giles Street**

**Raleigh, North Carolina 27612**

**919-782-7745**

## ATTACHMENT A

### 1. Introduction

On April 19, 1996, the Federal Communications Commission issued a Notice of Proposed Rulemaking (NOPR) in CC Docket No. 96-98 requesting comments on those sections of the Telecommunications Act of 1996 governing access to utility poles, ducts, conduits and rights-of-way.

In response to the Commission's NOPR, many parties submitted comments urging the Commission to develop a single standard or set of standards to be used in determining when a utility may deny access to its poles for safety, reliability or engineering reasons. Moreover, some parties recommended that the Commission establish a "rebuttable presumption" that access is possible and that utilities bear the burden of proof in denying access.

This report addresses the complex and fact-dependent safety, engineering and reliability issues relating to pole attachments, and concludes that a single standard or set of standards cannot adequately address these concerns. This report also concludes that any attempt to impose such standards would compromise the integrity of electric transmission and distribution systems and would adversely affect the safety and reliability of electric service.

## 2. Safety

### a. Overview

The National Electrical Safety Code (NESC) is American National Standard ANSI C2. But although the NESC is a national standard, it has not been adopted as a standard in every state. Indeed, the use of the NESC varies greatly among the states. For example, Virginia automatically adopts the most current edition of the NESC, but Mississippi automatically adopts only portions of the current edition. North Carolina adopts certain editions of the NESC pursuant to a rulemaking proceeding, whereas California and Hawaii have created their own safety codes using modifications of the NESC. Moreover, several states have adopted past editions of the NESC but have not yet adopted the current edition as state law. For example, as of February 1996, Colorado was still requiring the use of the 1984 NESC. **Exhibit 1** is a summary of the different safety codes used by the different states.

The NESC, however, is not a design code and should not be used as such. (NESC Rule 010). The promulgators of the code have long recognized that using code requirements as design specifications will often result in eventual code violations. Design specifications must also include considerations of changes in conditions that are expected over time. Engineering design standards take into account site-specific conditions, and such standards are necessary to ensure that the code (or other applicable safety standard) is met over the life

## ATTACHMENT A

of the installation. Accordingly, design standards often must exceed code requirements at the time of installation to allow for expected changes during the life of the facility.

Examples of such design standard practices include, but are not limited to:

- increased ground clearances at installation to allow for pole movement, road paving, conductor sag changes, and similar occurrences;
- increased clearances at pole attachment points to allow for adequate mid-span clearances under varying conditions, such as ice accumulation and conductor temperature increases due to load and/or heating from the sun; and
- increased pole strength to allow for structure deterioration, varying wind and icing conditions, and similar considerations

In sum, design practices cannot be the same for every system or for every area of the nation, because the conditions affecting design practices are site-specific and require the application of good engineering judgment.

### b. Other Safety Concerns

Other safety concerns include the unsafe and unskilled practices of many attaching entities. We have investigated accidents where attaching entities' workers come into contact with energized parts on poles simply because they were not wearing appropriate safety equipment, such as a hard hat. Moreover, some electric supply vaults have exposed

## ATTACHMENT A

energized parts, therefore vaults and risers must be accessed only by qualified persons.

Based on our experience, few attaching entities have workers who are qualified to enter such vaults.

In our opinion, any "rebuttable presumption" that access to a pole is possible ignores the safety concerns of the pole owner and other attaching entities, and may also impair the ability of the pole owner to exercise its engineering judgment. Moreover, it is our opinion that the pole owner should not bear the burden of proving that the attaching entity's employees and contractors have the appropriate safety training and carry out their work in a safe manner. Finally, utilities must retain the right to evict attaching entities for violations of safe work practices to ensure the safety and reliability of the electric system.

In sum, any attempt to establish a set of "national utility safety standards" would have significant adverse effects upon the safety and reliability of electric service.

### 3. Engineering

#### a. Overview

There is no national engineering design standard. Engineering standards vary from one utility to the next -- and sometimes from one county to the next -- based on site-specific conditions. Appropriately designed engineering standards cannot be "cookbook" in nature and address all possible site specific conditions, such as:

## ATTACHMENT A

- meeting the safety code requirements over the life of the installation;
- addressing conditions not specified in the applicable safety code;
- anticipating weather conditions such as wind, ice, high and low temperatures;
- allowing for future load growth;
- meeting varying levels of reliability;
- adjustments for required maintenance and operational characteristics; and
- many others conditions that cannot be identified until the planning and design processes are underway.

Given all these elements and site-specific conditions, it is our opinion that utilities (i.e., structure owners) should not be required to bear the burden of proof in denying access for engineering purposes. To do so would, in effect, require utilities to evaluate and possibly design the attaching entity's system. Indeed, a party requesting permission to attach to structures would have little incentive to do an appropriate job of designing their system, knowing that the pole owner would be obligated to address the design in such detail that any design flaws will be rectified.

### b. "Available" Pole Space & Engineering Principles

One must also consider the relationship between available pole space and sound engineering principles. Any rule requiring utilities to permit attachments where pole space appears to be available would ignore many engineering issues, such as:

## ATTACHMENT A

- mid-span clearance requirements;
- ground clearance requirements;
- clearances for drip loops and jumpers;
- pole strength requirements;
- possible maintenance and/or operational concerns; and
- concerns that cannot be identified except by site specific analysis.

Moreover, many of the engineering issues discussed above are themselves site-specific. For example, mid-span and ground conductor and cable minimum and maximum sags are greatly affected by:

- span length;
- type of cable or conductor;
- icing conditions;
- electrical loads;
- ambient air temperatures; and
- initial sag and tension conditions.

All of these conditions are site-specific and vary greatly.

Furthermore, conductor and cable sags are indirectly proportional to conductor and cable tensions. The smaller the sag in a particular span, the greater the tension within that



## ATTACHMENT A

span. Over years of consulting with the electric utility industry on various safety and engineering issues, we have noted many instances where an attaching entity, by paying attention only to clearances at the pole attachment point (and possibly mid-span clearances), has created unbalanced tensions at structures. In effect, what the attaching entity has done is to "over-tension" one span in order to get the desired clearance somewhere else in the span. In doing this, the attaching entity has created a situation where the poles are pulled together, causing distribution conductors and cables to sag to a lower position. This has resulted in code violations that have resulted in personal injuries involving contacts with overhead power conductors. In some instances, attaching entities pulled cables so tight in order to get clearance over a road that they overtensioned the span and broke a power crossarm above, dropping energized conductors onto the workers and onto the road. And they have done this to avoid paying for changing out the pole to get the proper height.

This problem of over-tension in a span can also create excessive vertical stresses on dead-end pole structures. Vertical stresses on dead-end structures beyond the allowable design limits have resulted in a buckling of the structure.

### c. Structure Strength

Another equally important consideration for pole attachments is structure strength. Each attachment contributes to structural stresses. Appropriate engineering calculations